

Designer's Situation Awareness Toolbox (DeSAT), Phase II

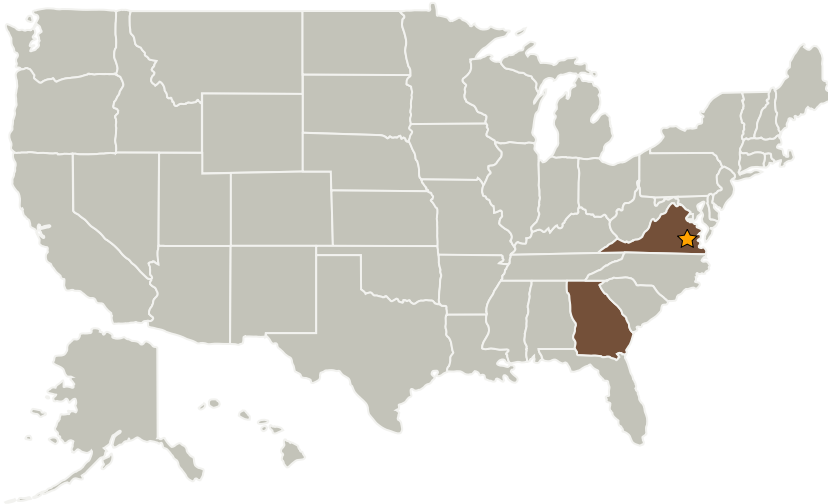
Completed Technology Project (2002 - 2004)



Project Introduction

This SBIR will develop a design decision support tool that will assist designers in providing a powerful, supportive work environment for aviation crews that support the maintenance of a high level of situation awareness in the flight environment. DeSAT will be developed as a design decision support system providing the capability to (1) analyze the situation awareness requirements associated with operational requirements (which could include ground based or flight based crew members), (2) compare situation awareness information requirements to system design features to identify potential situation awareness problems and deficiencies early in the design process, and (3) evaluate the degree to which design concepts support SA via the Situation Awareness Global Assessment Technique (SAGAT). DeSAT will be developed for analysis of SA for both individual crew stations and for distributed teams operating across flight and time. DeSAT will allow designers to modify design concepts early in the design process to ensure that they provide the needed situation awareness to system users.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Langley Research Center(LaRC)	Lead Organization	NASA Center	Hampton, Virginia
SA Technologies, Inc.	Supporting Organization	Industry	Marietta, Georgia



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Langley Research Center (LaRC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations

Georgia

Virginia

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Project Manager:

Jon E Jonsson

Principal Investigator:

Mica Endsley

Technology Areas

Primary:

- TX06 Human Health, Life Support, and Habitation Systems
 - └ TX06.6 Human Systems Integration
 - └ TX06.6.1 Human Factors Engineering